

## Liverpool John Moores University

Title: PRACTICAL LABORATORIES 2  
Status: Definitive  
Code: **4006APCHEM** (121128)  
Version Start Date: 01-08-2021

Owning School/Faculty: Pharmacy & Biomolecular Sciences  
Teaching School/Faculty: Pharmacy & Biomolecular Sciences

Team	Leader
Mark Wainwright	Y
Melissa Russell	
Ian Bradshaw	
Philip Denton	

**Academic Level:** FHEQ4      **Credit Value:** 20      **Total Delivered Hours:** 78  
**Total Learning Hours:** 200      **Private Study:** 122

### Delivery Options

Course typically offered: Semester 2

Component	Contact Hours
Practical	78

**Grading Basis:** 40 %

### Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Test	Test	Online Test	50	
Report	Report	Practical Report	50	

### Aims

*This course will focus on simple organic and inorganic synthesis. It will also build on the areas covered in Practical Labs 1, applying isolation and analytical techniques to the products obtained from the contained chemical syntheses/conversions.*

## Learning Outcomes

After completing the module the student should be able to:

- 1 Synthesise simple organic molecules.
- 2 Synthesise simple inorganic compounds.
- 3 Assay simple organic and inorganic compounds using Physical and Analytical Chemistry.
- 4 Select and use functional group tests in order to distinguish between chemical samples.

## Learning Outcomes of Assessments

The assessment item list is assessed via the learning outcomes listed:

Online Test	1	2	3	4
Practical Report	1	2	3	4

## Outline Syllabus

*Functional group chemistry and reactions; aromatic chemistry; simple polymer synthesis; determination of kinetic and thermodynamic properties; basic chemistry of inorganic compounds.*

## Learning Activities

Laboratory classes in Organic and Inorganic synthesis, physical measurement and analytical assay.

## Notes

The course provides an introduction to laboratory synthesis and testing in the areas of Organic, Inorganic and Analytical Chemistry. As with the other level four practical module, this also introduces and underpins the materials aspect of the course.